



**UNODC**

United Nations Office on Drugs and Crime

**INTERNATIONAL QUALITY  
ASSURANCE PROGRAMME (IQAP)**

**INTERNATIONAL COLLABORATIVE  
EXERCISE (ICE)**

**Summary Report**

**SEIZED MATERIAL  
2010/2**



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## Test Samples Information

Samples	Comments on samples
Sample 1	SM1 was prepared from a seizure of amphetamine containing 17% w/w amfetamine base. This sample also contained caffeine and lactose.
Sample 2	SM2 contained lidocaine (15%) and procaine (15%).
Sample 3	SM3 was prepared from an illicit sample of amphetamine containing 71% w/w amfetamine base.
Sample 4	SM4 was made from self raising flour and contained no drugs included in the ICE menu.

Samples	Substances	Concentrations	Comments on substances
Sample 1	Caffeine	0 %	Quantification not required
	Amfetamine	17 %	
	Lactose	0 %	Quantification not required
Sample 2	Procaine	15 %	Quantification not required
	Lidocaine (Lignocaine)	15 %	Quantification not required
Sample 3	Amfetamine	71 %	
Sample 4	[blank sample]		

This report contains the data received from laboratories participating in the current exercise. The results compiled in this report are not intended to be an overview of the quality of work and cannot be interpreted as such. These comments do not reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

## Introduction

### Summary Comments

#### UNODC International Collaborative Exercises (ICE)

An important element of the UNODC International Quality Assurance Programme (IQAP) is the implementation of the International Collaborative Exercises (ICE). The exercises allow laboratories, from both developing and developed countries, to continuously monitor their performance in drug testing on a truly global scale. This report provides information on analytical results of laboratories participating in Seized Materials (SM) group. In order to maintain confidentiality, the participating laboratories have been assigned random "WebCodes". These codes will change in every round. Two rounds are offered per year with each round presenting participants with four different test samples for analysis .

The analytical results returned by laboratories participating in ICE are evaluated by UNODC and a confidential report is provided to each laboratory on its own performance. Analytical results are reviewed by the UNODC Standing Panel of Forensic Experts which oversees the implementation of these exercises, and offers guidance and support in addressing relevant quality issues. The exercises provide an overview of performance and capacity of participating laboratories and enable UNODC to tailor technical support in the laboratory sector for greatest impact.

## Codes and Abbreviations

(+) “positive”: Indicates that the analyte is identified; for presumptive tests (e.g. colour reactions), indicates that a positive reaction was obtained.

(-) “negative”: Indicates that the analyte is not identified.

(ANP): Analysis not performed.

Tech Code	Name
140	Colorimetric reactions
141	Marquis reagent (sulphuric acid, formaldehyde)
142	Cobalt thiocyanate
150	Thin Layer Chromatography
160	High Performance Liquid Chromatography
161	High Performance Liquid Chromatography with diode array detection
170	Gas Chromatography NPD
171	Gas Chromatography FID
172	Gas Chromatography ECD
180	Gas Chromatography/Mass Spectrometry
190	Fourier Transform Infrared Spectrometry
200	Spectrophotometry (visible, UV)
210	Others (specify)
211	NMR
220	Microcrystal test
230	Liquid chromatography/mass spectrometry
231	Liquid chromatography/tandem mass spectrometry



## Sample 1 Analysis

### Identified substances for Test Sample 1

Code	Identified Substances
043DGG	AMPHETAMINE
0IXEIB	amfetamine
0WLISW	amfetamine
27UK5U	Amphetamine
2HDQIE	amfetamine
2PBB39	amphetamine and caffeine
2PV2EF	Amfetamine
4JJXE9	amphetamine
4MHZEW	methamphetamine , amfetamine and caffeina
4SQ7LB	Amphetamine
5ECEUE	amfetamine
5RFV5	AMFETAMINE
61AKXC	Amphetamine
6AXCXX	Amfetamine sulfate
6GAX2Q	amfetamine sulfate (11.1% as base)
6L333G	Amfetamine and caffeine
8GOLOO	Amfetamine
8GYZF6	Amphetamine
91C2DV	Amphetamine
9R42IM	Amphetamine Sulphate Salt
AKBRFW	amfetamine
BFIZKK	Amfetamine
CIAWJJ	Amphetamine
CIRRME	amfetamine sulphate
CR7ZIZ	Amfetamine
CYCBFJ	Amphetamine
D1ML9X	Amphetamine
DSIIZI	amphetamine
EETXBE	Amphetamine
EFYFAH	Amfetamine
F6X6YE	AMPHETAMINE
FCWGDG	Amphetamine
FDDDDD	Amphetamine
FOAXOB	Amphetamine
GBEQOO	amfetamine
HYYGXY	amfetamine
I00I00	amphetamine
I3M0R0	Amphetamine
I65IRM	Amfetamine
IXIIGE	Amphetamine



Code	Identified Substances
J16LCN	Amphetamine (Caffiene)
KDXDTQ	Amphetamine (sulphate)
KIWTWW	amfetamine, MBDB
KLKETH	Amphetamine
KQAWWM	amfetamine
KRVKKK	Amfetamine
LR8ZF8	amfetamine
MD3HBL	Amphetamine
MMMPAF	Amphetamine and caffeine
NDNKNO	Amphetamine
NRYXER	amphetamine sulfate
O8868C	Caffeine
O9TL5W	Anfetamine
OCCZJT	amphetamine sulphate
OX8BRK	amphetamine
PALMQU	Amphetamin
PANNM8	amfetamine sulfate
PB6010	amphetamine sulphate
PLLLL8	Amphetaïne
QDRFLK	mphetamine Sulphate (Benzeneethanamine alpha methyl)
RD7T63	amphetamine
RUFE2Q	Amphetamin
SF333G	amfetamine sulphate
STOSY4	Amfetamine
SZSHC7	Amphetamine
T1SY9H	amfetaine sulphate
T4JYJJ	amphetamine sulphate
T7IRSI	Amphetamine and cafeine
TWSYBV	Amphetamine
UD61EE	Amphetamine
US8XCY	Amfetamine
UTTTMB	Amphetamine
V4I4MW	CAFFEINE
VAYVVE	Amphetamine
VFEEPL	Amphetamine
VRFAV8	amphetamine
W25S5O	amfetamine
W6KMFE	Amphetamine sulphate
WPQKKK	amfetamine
WRWSKK	Amphetamine, Caffeine
XWPXXO	amfetamine
YTNTAT	Amfetamine
ZCUG1P	AMPHETAMINE SULFATE
ZXEDY8	amfetamine



## Statement of findings for Test Sample 1

Code	Amfetamine	Caffeine	Lactose	
043DGG	+	+	ANP	
	Powder containing amphetamine. Also detected caffeine.			
0IXEIB	+	ANP	ANP	
0WLISW	+	+	-	
	SM-1 found to contain of 15.10% Amfetamine and caffeine (caffeine reference not available for quantitative analysis)			
27UK5U	+	+	ANP	
	One bottle containing 0.23 grammes of a powder containing 0.04 grammes of amphetamine.			
2HDQIE	+	+	-	
	The sample contains amfetamine and caffeine			
2PBB39	+	+	ANP	
	test sample 2010/2/SM-1 was found to contain the following controlled drugs; amphetamine and caffeine			
2PV2EF	+	+	-	
	On analysis, I found the substance to contain 17.7 % amphetamine			
4JJXE9	+	+	ANP	
	The sample was found to contain amphetamine type stimulants (amphetamine)			
4MHZEW	+	+	ANP	
	sm1 result be a mixture of methamphetamine, amphetamine and caffeine, but we cannot obtain your concentrations.			
4SQ7LB	+	+	ANP	
	Presence of amphetamine confirmed - Class B. Presence of caffeine indicated - not controlled.			
5ECEUE	+	+	+	
	Amphetamine identified by GC-MS and quantified by HPLC-DAD upon a calibration curve performed by a certified reference material of amphetamine. Caffeine and lactose present as diluent.			
5RFV5	+	+	-	
	SM-1 contains a mixture of Amphetamine and Coffeine with 18% Amphetamine base			
61AKXC	+	+	-	
	The powder contained 15% amphetamine together with caffeine. Amphetamine is a Class B controlled drug.			
6AXCXX	+	+	-	
	Using TLC, FTIR, GC/FID and GC/MS analytical techniques.			
6C6UO6	+	+	-	
6GAX2Q	+	+	+	
	+ caffeine (42.7%) and N formyl amphetamine			



Code	Amphetamine	Caffeine	Lactose	
6L333G	+	+	-	
	Examination of the powder revealed the presence of amphetamine			
8GOLOO	+	+	ANP	
8GYZF6	+	+	-	
	Amphetamine detected only by GCMS. Caffeine detected by both, GCMS and FTIR.			
91C2DV	+	+	ANP	
	On analysis, I found the powder to contain amphetamine and caffeine. Amphetamine is a controlled drug under the Misuse of Drugs Acts 1977 and 1984. I did not determine the amphetamine content of the powder. Caffeine is not a controlled drug.			
9R42IM	+	+	+	
	Caffeine, Lactose, Methylphenidate			
AKBRFW	+	+	-	
	This sample contains amphetamine which is listed as a controlled drug, according to the xxxx order, appendix III of February 22nd 1990.			
BFIZKK	+	+	-	
	Amphetamine			
CIAWJJ	+	+	ANP	
	We found Amphetamine as controlled drugs in this sample			
CIRRME	+	+	+	
	amphetamine sulphate, 16,94% as base, caffeine, lactose, 4-methyl-5 phenylpyrimidine, N-formylamphetamine			
CR7ZIZ	+	+	+	
	It contains amphetamine in a purity of 24.8%. It also contains caffeine and lactose.			
CYCBFJ	+	+	-	
	The sample contained 18.3% amphetamine			
D1ML9X	+	+	ANP	
	0.234g Amphetamine			
DSIIZI	+	+	+	
	the sample contains amphetamine (17% as base), caffeine (50%) and lactose			
EETXBE	+	+	-	
	the sample contains 18.2% Amphetamine and caffeine			
EFYFAH	+	+	+	
	Amphetamine, caffeine and lactose was determined in sample 1. Content of amphetamine was 18 % (as a base).			
F6X6YE	+	+	-	
	Sample SM-1 represent white powder that contains psychoactive substance AMPHETAMINE and caffeine.			



Code	Amphetamine	Caffeine	Lactose	
FCWGDG	+	+	<b>ANP</b>	
	Caffeine was detected			
FDDDDD	+	+	<b>ANP</b>	
	The powder in sample 2010/2/SM-1 was found to contain Amphetamine			
FOAXOB	+	+	<b>ANP</b>	
	Sample 2010/2/SM-1 contained 231 milligrams of powder. The powder was analysed and found to contain amphetamine. Amphetamine is a Class B controlled drug subject to the provisions of the Misuse of Drugs Act 1971.			
GBEQOO	+	+	-	
	In the sample 1. we have found amphetamine who is on the list of the controlled substance			
HYYGXY	+	+	-	
I00100	+	+	<b>ANP</b>	
	sample contains 17.3% of amphetamine (as base)			
I3M0R0	+	+	<b>ANP</b>	
	The powder in SM1 was analysed and found to contain amphetamine.			
I65IRM	+	+	+	
	the sample contains Amphetamine sulfate, caffeine, lactose			
IXIIGE	+	+	-	
	On analysis, I found the sample "2010/2/SM-1" to contain Amphetamine and Caffeine			
J16LCN	+	+	<b>ANP</b>	
	Amphetamine reported			
JY4CUT	+	+	<b>ANP</b>	
KDXDTQ	+	+	+	
	we also found caffeine, and lactose			
KHHUDU	-	+	<b>ANP</b>	
KIWTWW	+	+	-	
	Sample containing amphetamine, MBDB, formyl amphetamine and caffeine			
KLKETH	+	+	<b>ANP</b>	
	Sample 2010/2/SM-1 gave a positive result for amphetamine, a controlled substance.			
KQAWWM	+	<b>ANP</b>	<b>ANP</b>	
	Presence of amphetamine			
KRVKKK	+	+	+	
	This test sample is amphetamine mixture with characteristic compounds often found in seized amphetamine with caffeine as adulterant and lactose as diluent.			



Code	Amphetamine	Caffeine	Lactose	
LR8ZF8	+	+	ANP	
	sample was dissolved in a certain amount of MeOH/CHCl3 solution. the solution was analyzed by GC-MS and its massa spectrum was compared to the one collected on a 1 ppm fresh prepared solution of D,L-amfetamine			
MD3HBL	+	+	+	
	The sample contains 16.83 % amphetamine base (as sulphate salt ) Caffeine and lactose were also detected.			
MMMPAF	+	+	ANP	
	Color test = marquis : orange turning to brown, simon : pink to cherry-red, TLC = TA and TE : Amphetamine and caffeine, GC = Amphetamine base 21.04%, Caffeine 51.62%, GC-MS = Amphetamine and caffeine			
NDNKNO	+	+	-	
	The powder contained 18% amphetamine together with caffeine. Amphetamine is a class B controlled drug.			
NRYXER	+	+	-	
	presence de produit stupefiant repris dans l'arrêté du 22/02/1990 modifié			
O8868C	-	+	ANP	
	Caffeine detected in sample SM-1			
O9TL5W	+	+	+	
OCCZJT	+	+	+	
	white powder			
OX8BRK	+	+	+	
	L'échantillon contient de l'amphetamine, substance stupéfiante reprise à l'annexe III de l'arrêté du 22 février 1990 modifié.			
PALMQU	+	+	ANP	
PANNM8	+	+	+	
	Caféine Lactose			
PB6010	+	+	+	
	sample contains mixture of amphetamine sulphate, caffeine and lactose. The amphetamine content (as a base) - 16.9% (SD=0.6)			
PLLLL8	+	+	ANP	
	After marquis reaction is + appropriate quantity of powdered sample is dissolved in ethanol sonicate, filtration, the filtrate evaporate to 100 micro liter and identified by TLC and confirmed by GC/MS, and quantitation by GC/NPD			
QDRFLK	+	+	ANP	
	The sample was found to contain amphetamine sulphate			
RD7T63	+	+	ANP	



Code	Amphetamine	Caffeine	Lactose	
RGPVPP	+	+	ANP	
RUFE2Q	+	+	ANP	
	Gas Chromatography/Mass Spectrometry			
SF333G	+	+	+	
	This sample contains amphetamine sulphate (17.8 % as base), cut with caffeine (61.3 %) and lactose.			
STOSY4	+	+	ANP	
	found amphetamine with percentage by weight 14.7% and caffeine			
SZSHC7	+	+	-	
	TLC, GC-MS			
T1SY9H	+	+	+	
	the sample is a mixture of amphetamine sulphate, caffeine and lactose			
T4JYJJ	+	+	+	
	caffeine, lactose			
T7IRSI	+	+	+	
	In the sample they are amphetamine sulphate, lactose and caffeine.			
TWSYBV	+	+	-	
	The powder was analysed when it was found to contain Amphetamine. Caffeine was indicated but not confirmed.			
UD61EE	+	+	ANP	
	Sample 2010/2/SM-1 was found to contain controlled substance AMPHETAMINE included in Table I of D.P.R. 309/90 (xxxx Law on psychotropic substances) and Schedule II under the UN Convention on Psychotropic Substances of 1971. Sample 2010/2/SM-1 was also found to contain CAFFEINE (not controlled).			
US8XCY	+	+	-	
	Sample contained Amphetamine 18% by weight and caffeine			
UTTTMB	+	+	-	
	l'échantillon contient du sulfate d'amphétamine .			
V4I4MW	-	+	ANP	
	COMMON ADULTERANT IN PASTE BASE OF COCAINE SAMPLES IN OUR COUNTRY			
VAYVVE	+	+	ANP	
	GC/MS detect also caffeine			
VFEEPL	+	+	ANP	
	The powder was analysed and found to contain Amphetamine.			
VRFAV8	+	+	ANP	
	The sample was found to contain amphetamine.			



Code	Amfetamine	Caffeine	Lactose	
W25S5O	+	+	+	
	Sample 2010/2/SM-1 consists of white powder. Amfetamine, a prohibited substance included in the National Law for Narcotics 3459/2006, is found to be present in the sample 2010/2/SM-1.			
W6KMFE	+	+	-	
	Sample 2010/2/SM-1 contains an average of 23% AMPHETAMINE SULPHATE. Amphetamine sulphate is a Class B controlled drug under the provisions of the Misuse of Drugs Act 1971 (as amended). Caffeine is not controlled under the provisions of the Misuse of Drugs Act 1971 (as amended). The sample contained 232 milligrams of an off-white powder.			
WLFWUS	+	+	ANP	
WPQKKK	+	+	ANP	
	White-yellow powder, net weight 0.229 g, containing 19.4% of amfetamine. Sample containing also 55.6% of caffeine			
WRWSKK	+	+	ANP	
XWPXXO	+	+	ANP	
	the sample contains amfetamine and caffeine detected by marquis reagent,tlc and confirmed by gcms			
YTNTAT	+	+	+	
ZCUG1P	+	+	+	
	CAFFEINE, LACTOSE HYDRATE			
ZSZ3ZZ	+	+	ANP	
ZXEDY8	+	+	-	
	amfetamine+caffeine			

**Response Summary**

Participants: 90

Amfetamine:	87
Caffeine:	88
Lactose:	23



**Identification methods for Test Sample 1**

**Legend:** S ... used for Screening I ... used for Identification SI ... used for both

Analytical Technique Codes														
Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
043DGG	S		S	S				I	I					
0IXEIB				S		I			I					
0WLISW		S	S	I					I					S Fast Blue Salt B
27UK5U		S	S			I			SI	I				
2HDQIE	S	S	S						I	I				
2PBB39									SI					
2PV2EF		S							SI	I				
4JJXE9						S			I			I		
4MHZEW	I	SI	SI	SI						I	I			
4SQ7LB		S	S						I					
5ECEUE					I	I		I	SI	I				
5RFV5	I			SI					I	I				
61AKXC		S	S						I	I				
6AXCXX	SI			SI					I	I				
6C6UO6									SI	I				
6GAX2Q				I		I			SI	I				
6L333G				SI			SI		I					
8GOLOO									I	S				
8GYZF6									SI	I				
91C2DV				I					I					
9R42IM	S					I			SI					
AKBRFW									I	I				
BFIZKK				SI					I	I				
CIAWJJ				S				I	I					
CIRRME	S	S	S						I	I				I XRD
CR7ZIZ	S								I					
CYCBFJ	S	S	S	I					I	I				
D1ML9X		S	S						I					
DSIIZI		S			I				I					
EETXBE					I				SI					
EFYFAH									I	I				
F6X6YE		S	S	SI										
FCWGDG									SI	I				
FDDDDD	S								I					
FOAXOB		S	S						I					



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
GBEQOO				I					I	SI				
HYYGXY									I	I				S ion mobility spectrometry
I00I00	S	S	S						I	I				
I3M0R0		S	S						SI					
I65IRM		S	S	SI					I					
IXIIGE		S	S	I					I	I				S Duquenois Levine Test
J16LCN		S	S						I					
JY4CUT	S	S	S	I					I					
KDXDTQ				SI					I					
KHHUDU	S								I					
KIWTWW								I	SI					
KLKETH		S	S						I					
KQAWW M													SI	
KRVKKK				S		I			I	I				
LR8ZF8								I	SI					
MD3HBL		S		SI		I			I	SI				
MMMPAF	I	SI	S	I				I	I	I				
NDNKNO		S	S						I	I				
NRYXER		S	S						I	I				
O8868C		S		S					I					
O9TL5W									I	SI				
OCCZJT									SI	I				
OX8BRK				I					SI	I				
PALMQU		I		I					SI					
PANNM8									SI					
PB6010		S	S	I		I			I	I				
PLLLL8		S	S	SI			I	I	I					
QDRFLK	S			I	I				I					
RD7T63								I	SI	I				
RGPVPP						I			SI					
RUFE2Q	I	I	I	I					SI					
SF333G								I	I	I				
STOSY4									SI					
SZSHC7	SI	SI	S	I		I			I					
T1SY9H		S		SI				I	I	I				
T4JYJJ	S								I	I				
T7IRSI									I					
TWSYBV		S							I					S DMAB
UD61EE									I	SI				



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
US8XCY		S	S						I					
UTTTMB									I	I				
V4I4MW							SI		SI					
VAYVVE		S	S						I					S duquenois-levis
VFEEPL		S	S						I					
VRFV8									SI					
W25S5O	S	S		I	I		I	I						
W6KMFE		S	S						I	I				
WLFWUS				S		I			I					
WPQKKK	S	S	S					I	I					
WRWSKK									I					S FPIA
XWPXXO	S	S	S	I					I		S			
YTNTAT						I			SI	SI				
ZCUG1P						I			SI					I XRD
ZSZ3ZZ	S							I	I					
ZXEDY8	SI	SI	S	S				I	I					

**Response Summary**

Participants: 90 (combined ... some laboratories used technique for screening and for identification)

Section	140	141	142	150	160	161	170	171	180	190	200	230	231	210
Screening	19	38	32	18	0	1	2	0	25	6	1	0	1	6
	21.1%	42.2%	35.6%	20.0%	0.0%	1.1%	2.2%	0.0%	27.8%	6.7%	1.1%	0.0%	1.1%	6.7%
Identification	7	6	2	27	5	13	4	14	86	38	1	1	1	2
	7.8%	6.7%	2.2%	30.0%	5.6%	14.4%	4.4%	15.6%	95.6%	42.2%	1.1%	1.1%	1.1%	2.2%
<b># labs using this technique</b>	<b>23</b>	<b>40</b>	<b>33</b>	<b>34</b>	<b>5</b>	<b>14</b>	<b>4</b>	<b>14</b>	<b>86</b>	<b>39</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>8</b>
	<b>25.6%</b>	<b>44.4%</b>	<b>36.7%</b>	<b>37.8%</b>	<b>5.6%</b>	<b>15.6%</b>	<b>4.4%</b>	<b>15.6%</b>	<b>95.6%</b>	<b>43.3%</b>	<b>2.2%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>8.9%</b>



**False positives for Test Sample 1**

<b>Code</b>	<b>Name</b>
4MHZEW	Metamfetamine
KIWTWW	N-methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine (MBDB)

**Z-Scores for Test Sample 1**

CODE	Amfetamine MAD: 1.0		
	Conc. *	AbsDev	ZScore
0IXEIB	16.0	1.3	0.9
0WLISW	15.1	2.2	1.5
27UK5U	17.0	0.3	0.2
2PV2EF	17.8	0.5	0.3
5ECEUE	16.5	0.8	0.5
5RFVW5	18.0	0.7	0.5
61AKXC	15.0	2.3	1.6
6AXCXX	12.8	4.5	3.1
6C6UO6	15.7	1.6	1.1
6GAX2Q	11.1	6.2	4.2
6L333G	15.5	1.8	1.2
8GYZF6	18.0	0.7	0.5
9R42IM	16.8	0.5	0.3
AKBRFW	18.0	0.7	0.5
CIAWJJ	11.4	5.9	4.0
CIRRME	16.9	0.4	0.2
CR7ZIZ	24.8	7.5	5.1
CYCBFJ	18.3	1.0	0.7
DSIIZI	17.0	0.3	0.2
EETXBE	18.2	0.9	0.6
EFYFAH	18.0	0.7	0.5
FCWGDG	19.8	2.5	1.7
HYYGXY	18.2	0.9	0.6
I00I00	17.3	0.0	0.0
KDXDTQ	18.7	1.4	0.9
KIWTWW	22.4	5.1	3.5
KRVKKK	17.2	0.1	0.1
LR8ZF8	14.4	2.9	2.0
MD3HBL	16.8	0.5	0.3
MMMPAF	21.0	3.7	2.5
NDNKNO	18.0	0.7	0.5
O9TL5W	4.4	12.9	8.7
OCCZJT	15.8	1.5	1.0
PALMQU	17.5	0.2	0.1
PANNM8	19.0	1.7	1.1
PB6010	16.9	0.4	0.3
PLLLL8	10.3	7.0	4.7
QDRFLK	57.0	39.7	26.8
RD7T63	17.9	0.6	0.4
RGPVPP	17.7	0.4	0.3
RUFE2Q	18.1	0.8	0.6



CODE	Amfetamine MAD: 1.0		
	Conc. *	AbsDev	ZScore
SF333G	17.8	0.5	0.3
STOSY4	14.7	2.6	1.8
T7IRSI	16.5	0.8	0.6
US8XCY	18.0	0.7	0.5
VAYVVE	14.8	2.5	1.7
W6KMFE	17.0	0.3	0.2
WLFWUS	31.3	14.0	9.5
WPQKKK	19.4	2.1	1.4
WRWSKK	19.0	1.7	1.1
YTNTAT	16.3	1.0	0.7
ZSZ3ZZ	7.9	9.4	6.3
ZXEDY8	18.0	0.7	0.5

\*) Concentration: w/w %

Z-Score has been calculated as **modified Z-Score** as it is a robust method and therefore relatively insensitive to outliers.

**Modified Z-Score = 0.6745 \* AbsDev/MAD**

**AbsDev** = Absolute value of the difference between a laboratory value and the median of all the laboratory values for the given drug;

**MAD** = median absolute deviation about the median.

Modified Z-scores with an absolute value of greater than 3.5 should be considered as potential outliers.

Reference:

Iglewicz, B. and Hoaglin, D. C.: 1993 How to Detect and Handle Outliers, American Society for Quality Control, Milwaukee, WI

## Sample 2 Analysis

### Identified substances for Test Sample 2

Code	Identified Substances
0WLISW	none
2PBB39	lidocaine and procaine
4JJXE9	lidocaine and procaine
4MHZEW	procaine and starch
4SQ7LB	Procaine, Lignocaine
5RFV55	none
6L333G	Procaine and Lidocaine
91C2DV	Amphetamine
BFIZKK	No
CIAWJJ	Lidocaine and Procaine
D1ML9X	Lignocaine and procaine
F6X6YE	COCAINE
FDDDDD	Lignocaine and Procaine
I3M0R0	Lignocaine and Procaine
IXIIGE	Lidocaine and Procaine
KHHUDU	Lidocaine
MMMPAF	Procaine and lidocaine
O8868C	Lidocaine
OCCZJT	no
PLLLL8	Lidocaine and procaine
T1SY9H	/
T7IRSI	Lidocaine and procaine
V4I4MW	LIDOCAINE,PROCAINE
WRWSKK	Lidocaine 14%
YTNTAT	/
ZXEDY8	-



## Statement of findings for Test Sample 2

Code	Lidocaine (Lignocaine)	Procaine	
043DGG	+	+	
	Powder containing procaine and lidocaine.		
0IXEIB	+	+	
	lidocaine, procaine		
0WLISW	+	+	
	SM-2 found to contain of 21.33% Procaine and 21.54% Lidocaine		
27UK5U	+	+	
	The sample was found to contain liocaine and procaine.		
2HDQIE	+	+	
	The sample contains lidocaine and procaine		
2PBB39	+	+	
	test sample 2010/2/SM-2 was found to contain the following controlled drugs; lidocaine and procaine		
2PV2EF	+	+	
	On analysis, I found the substance to contain lidocaine and procaine		
4JJXE9	+	+	
	The sample was found to contain lidocaine and procaine		
4MHZEW	-	+	
	positive result for color testing (cobalt tiocianate), after of puriting was identify for FTIR. The starch was obtained for solubility with alcohol.		
4SQ7LB	+	+	
	Presence of procaine and lignocaine indicated -not controlled.		
5ECEUE	+	+	
	Lidocaine and procaine identified by GC-MS and confirmed by GC-FID using CRM's. Not found controlled drugs.		
5RFV5	+	+	
	SM-2 contains Lidocaine and Procaine		
61AKXC	+	+	
	The powder contained lignocaine and procaine, therefore no controlled dugs were detected.		
6AXCXX	+	+	
	Using CR, IONSCAN, TLC, FTIR, GC/FID and GC/MS analytical techniques.		
6C6UO6	+	+	
6GAX2Q	+	+	
	Procaine (19.4%) et lidocaine (15.5%)		



Code	Lidocaine (Lignocaine)	Procaine	
6L333G	+	+	
	Examination of the powder did not revealed the presence of of any controlled drugs		
8GOLOO	+	+	
8GYZF6	+	+	
	Lidocaine and Procaine detected by both, GCMS and FTIR.		
91C2DV	+	+	
	On analysis, I found the powder to contain amphetamine, lignocaine and procaine. Amphetamine is a controlled drug under the Misuse of Drugs Acts 1977 and 1984. I did not determine the amphetamine content of the powder. Lignocaine and procaine are not controlled drugs.		
9R42IM	+	-	
	Lidocaine		
AKBRFW	+	+	
BFIZKK	+	+	
	Sample contains caffeine, lidocaine and procaine		
CIAWJJ	+	+	
	We found Lidocaine and Procaine as controlled drugs in this sample		
CIRRME	+	+	
	Lidocaine, Procaine		
CR7ZIZ	+	+	
	The results are provided according to the regulations of our country. It does not contain any controlled drugs. It contains procaine and lidocaine.		
CYCBFJ	+	-	
	The sample contained lidocaine		
D1ML9X	+	+	
	0.239g No controlled drugs detected		
DSIIZI	+	+	
	the sample contains lidocaine (20%) and procaine (16%)		
EETXBE	+	+	
	sample contain lidocaine and procaine		
EFYFAH	+	+	
	Procaine and lidocaine was determined in sample 2. Illicit drugs in sample 2 were not detected.		
F6X6YE	+	-	
	Sample SM-2 represent white powder that contains psychoactive substance COCAINE and lidocaine.		



Code	Lidocaine (Lignocaine)	Procaine	
FCWGDG	+	+	
	Lidocaine and Procaine		
FDDDDD	+	+	
	No controlled drugs detected, analysis shows the presence of lignocaine and procaine		
FOAXOB	+	+	
	Sample 2010/2/SM-2 contained 236 milligrams of powder. The powder was analysed and found to contain lignocaine and procaine. Lignocaine and procaine are not controlled drugs subject to the provisions of the Misuse of Drugs Act 1971.		
GBEQOO	+	+	
	in the sample 2 we have noticed a presence of lidocaine, procaine that is not on the list of the controlled substance		
HYYGXY	+	+	
I00I00	+	+	
	sample doesn't contain controlled drugs; sample contains procaine and lidocaine		
I3M0R0	+	+	
	The powder in item SM2 was analysed and no controlled drugs subject to the provisions of the misuse of Drugs Act 1971 were detected. This analysis showed the powder to contain lignocaine and procaine, both local anaesthetic drugs		
I65IRM	+	+	
	the sample contains 19 % Lidocaine, 18 % procaine, others substances not identified		
IXIIGE	+	+	
	On analysis, I found the sample "2010/2/SM-2" to contain Lidocaine and Procaine		
J16LCN	+	+	
	Lignocaine and Procaine reported		
JY4CUT	+	+	
KDXDTQ	+	+	
	We only found lidocaine and procaine		
KHHUDU	+	-	
	The finding was qualitative only. No quantitation performed.		
KIWTWW	+	+	
	Sample containing lidocaine and procaine		
KLKETH	+	+	
	No controlled substances were detected in sample 2010/2/SM-2.		
KQAWWM	<b>ANP</b>	<b>ANP</b>	



Code	Lidocaine (Lignocaine)	Procaine	
KRVKKK	+	+	
	This test sample is a mixture of local anesthetics procaine and lidocaine.		
LR8ZF8	+	+	
MD3HBL	+	+	
	The sample contains lidocaine and procaine. These compounds are typical diluents of cocaine.		
MMMPAF	+	+	
	Color test : Cobalt thiocyanate = blue, TLC = TA and TE : Procaine and lidocaine, GC = Procaine base 14.85% and lidocaine base 14.17%, GC-MS = Procaine and lidocaine		
NDNKNO	+	+	
	No controlled drugs were detected in the powder, which contained lignocaine and procaine.		
NRYXER	+	+	
	presence de lidocaine et de procaine		
O8868C	+	<b>ANP</b>	
	Lidocaine detected in sample SM-2		
O9TL5W	+	+	
OCCZJT	+	+	
	whitet powder containing procaine and lignocaine		
OX8BRK	+	+	
	L'échantillon renferme un mélange de procaine et de lidocaïne. La procaine et la lidocaïne sont des substances actives utilisées comme anesthésique local, substances reprises à la liste II des substances vénéneuses.		
PALMQU	+	+	
PANNM8	+	+	
	Lidocaïne Procaine		
PB6010	+	+	
	sample contains lidcaine and procaine hydrochloride (as was shown by FTIR)		
PLLLL8	+	+	
	After testing the powder by cobalt thiocyanate is + appropriate quantity in methanol, sonicate, after filtration evaporate to 100 micro liter and identified by TLC, cnfirmed by GC/MS, and quantitation by GC/FID		
QDRFLK	+	+	
	The sample was found to contain procain and Lidocain		



Code	Lidocaine (Lignocaine)	Procaine	
RD7T63	+	+	
RGPVPP	+	+	
RUFE2Q	+	-	
SF333G	+	+	
	This sample does not contain illicit drugs. It is a mixture of lidocaine (15.2 % as base), procaine (13.3 % as base) and calcium phosphate.		
STOSY4	+	+	
	Found procaine and lidocaine		
SZSHC7	+	+	
T1SY9H	+	+	
	The sample contains prokaine and lidocaine.		
T4JYJJ	+	+	
	lidocaine, procaine		
T7IRSI	+	+	
	In the sample they are lidocaine and procaine		
TWSYBV	+	+	
	The powder was analysed for the presence of drugs controlled under the terms of the Misuse of Drugs Act 1971 with a negative result. Lidocaine and procaine were indicated but not confirmed.		
UD61EE	+	+	
	Sample 2010/2/SM-2 was found to contain no controlled substances included in Table I of D.P.R. 309/90 (xxxx Law on psycotropic substances) or in Schedules I-IV of the UN Convention on Psychotropic Substances of 1971. Sample 2010/2/SM-2 was also found to contain LIDOCAINE and PROCAINE (not controlled).		
US8XCY	+	+	
	Sample contained Lidocaine and Procaine, negative for controlled drugs		
UTTTMB	+	+	
	aucun stupéfiant n'a été mis en évidence		
V4I4MW	+	+	
	ADULTERANTS IN COCAINE HCL STREET SAMPLES		
VAYVVE	+	+	
	Analyse with GC/MS show for the presence of procaine and lidocaine.		
VFEEPL	+	+	
	The powder was analysed for controlled substances with a negative result.		



Code	Lidocaine (Lignocaine)	Procaine	
VRFV8	+	+	
	No common controlled drug was detected in the sample.		
W25S5O	+	+	
	Sample 2010/2/SM-2 consists of white powder. No prohibited substances are found to be present in sample 2010/2/SM-2 according to the National Law for Narcotics 3459/2006.		
W6KMFE	+	+	
	Sample 2010/2/SM-2 contains lignocaine and procaine. Lignocaine and procaine are not controlled under the provisions of the Misuse of Drugs Act 1971 (as amended). The sample contained 229 milligrams of a white powder.		
WLFWUS	+	+	
WPQKKK	+	+	
	White powder, net weight 0.233 g, not containing controlled drugs. Sample containing 19.6% of lidocaine, 15.5% of procaine and a water soluble residue.		
WRWSKK	+	<b>ANP</b>	
XWPXXO	+	+	
	the sample contains lidocaine and procaine detected by scott reagent,tlc and confirmed by gcms		
YTNTAT	+	+	
ZCUG1P	+	+	
	LIDOCAINE HYDROCHLORIDE HYDRATE, PROCAINE.		
ZSZ3ZZ	+	+	
ZXEDY8	+	+	
	lidocaine+_procaine		

**Response Summary**

Participants: 90

Lidocaine (Lignocaine):	88
Procaine:	82

**Identification methods for Test Sample 2**

<b>Legend:</b>	<b>S</b> ... used for Screening	<b>I</b> ... used for Identification	<b>SI</b> ... used for both
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Analytical Technique Codes														
Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
043DGG	S		S	S				I	I					
0IXEIB				S		I			I					
0WLISW		S	S	I					I					S Fast Blue Salt B
27UK5U		S	S			I			SI	I				
2HDQIE	S	S	S						I	I				
2PBB39									SI					
2PV2EF		S							SI	I				
4JJXE9						S			I			I		
4MHZEW	I	SI	SI	SI						I	I			
4SQ7LB		S	S						I					
5ECEUE					I	I		I	SI	I				
5RFV5	I			SI					I	I				
61AKXC		S	S						I	I				
6AXCXX	SI			SI					I	I				
6C6UO6									SI	I				
6GAX2Q				I		I			SI	I				
6L333G				SI			SI		I					
8GOLOO									I	S				
8GYZF6									SI	I				
91C2DV				I					I					
9R42IM	S					I			SI					
AKBRFW									I	I				
BFIZKK				SI					I	I				
CIAWJJ				S				I	I					
CIRRME	S	S	S						I	I				I XRD
CR7ZIZ	S								I					
CYCBFJ	S	S	S	I					I	I				
D1ML9X		S	S						I					
DSIIZI		S			I				I					
EETXBE					I				SI					
EFYFAH									I	I				
F6X6YE		S	S	SI										
FCWGDG									SI	I				
FDDDDD	S								I					
FOAXOB		S	S						I					



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
GBEQOO				I					I	SI				
HYYGXY									I	I				S ion mobility spectrometry
I00I00	S	S	S						I	I				
I3M0R0		S	S						SI					
I65IRM		S	S	SI					I					
IXIIGE		S	S	I					I	I				S Duquenois Levine Test
J16LCN		S	S						I					
JY4CUT	S	S	S	I					I					
KDXDTQ				SI					I					
KHHUDU	S								I					
KIWTWW								I	SI					
KLKETH		S	S						I					
KQAWW M													SI	
KRVKKK				S		I			I	I				
LR8ZF8								I	SI					
MD3HBL		S		SI		I			I	SI				
MMMPAF	I	SI	S	I				I	I	I				
NDNKNO		S	S						I	I				
NRYXER		S	S						I	I				
O8868C		S		S					I					
O9TL5W									I	SI				
OCCZJT									SI	I				
OX8BRK				I					SI	I				
PALMQU		I		I					SI					
PANNM8									SI					
PB6010		S	S	I		I			I	I				
PLLLL8		S	S	SI			I	I	I					
QDRFLK	S			I	I				I					
RD7T63								I	SI	I				
RGPVPP						I			SI					
RUFE2Q	I	I	I	I					SI					
SF333G								I	I	I				
STOSY4									SI					
SZSHC7	SI	SI	S	I		I			I					
T1SY9H		S		SI				I	I	I				
T4JYJJ	S								I	I				
T7IRSI									I					
TWSYBV		S							I					S DMAB
UD61EE									I	SI				



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
US8XCY		S	S						I					
UTTTMB									I	I				
V4I4MW							SI		SI					
VAYVVE		S	S						I				S	duquenois-levis
VFEEPL		S	S						I					
VRFV8									SI					
W25S5O	S	S		I	I		I	I						
W6KMFE		S	S						I	I				
WLFWUS				S		I			I					
WPQKKK	S	S	S					I	I					
WRWSKK									I				S	FPIA
XWPXXO	S	S	S	I					I		S			
YTNTAT						I			SI	SI				
ZCUG1P						I			SI				I	XRD
ZSZ3ZZ	S							I	I					
ZXEDY8	SI	SI	S	S				I	I					

**Response Summary**

Participants: 90 (combined ... some laboratories used technique for screening and for identification)

Section	140	141	142	150	160	161	170	171	180	190	200	230	231	210
Screening	19	38	32	18	0	1	2	0	25	6	1	0	1	6
	21.1%	42.2%	35.6%	20.0%	0.0%	1.1%	2.2%	0.0%	27.8%	6.7%	1.1%	0.0%	1.1%	6.7%
Identification	7	6	2	27	5	13	4	14	86	38	1	1	1	2
	7.8%	6.7%	2.2%	30.0%	5.6%	14.4%	4.4%	15.6%	95.6%	42.2%	1.1%	1.1%	1.1%	2.2%
<b># labs using this technique</b>	<b>23</b>	<b>40</b>	<b>33</b>	<b>34</b>	<b>5</b>	<b>14</b>	<b>4</b>	<b>14</b>	<b>86</b>	<b>39</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>8</b>
	<b>25.6%</b>	<b>44.4%</b>	<b>36.7%</b>	<b>37.8%</b>	<b>5.6%</b>	<b>15.6%</b>	<b>4.4%</b>	<b>15.6%</b>	<b>95.6%</b>	<b>43.3%</b>	<b>2.2%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>8.9%</b>



**False positives for Test Sample 2**

<b>Code</b>	<b>Name</b>
91C2DV	Amfetamine
BFIZKK	Caffeine
F6X6YE	Cocaine



**Z-Scores for Test Sample 2**

Quantification is not required.



## Sample 3 Analysis

### Identified substances for Test Sample 3

Code	Identified Substances
043DGG	AMPHETAMINE
0IXEIB	amfetamine
0WLISW	Amfetamine
27UK5U	Amphetamine
2HDQIE	amfetamine sulfate
2PBB39	Amphetamine
2PV2EF	Amfetamine
4JJXE9	amphetamine
4MHZEW	anfetamine
4SQ7LB	Amphetamine
5ECEUE	amfetamine
5RFV55	Amfetamine
61AKXC	Amphetamine
6AXCXX	Amfetamine sulfate
6GAX2Q	amfetamine sulfate (26% as base)
6L333G	Amfetamine
8GOLOO	Amfetamine
8GYZF6	Amphetamine
91C2DV	Amphetamine
9R42IM	Amphetamine Sulphate Salt
AKBRFW	amfetamine
BFIZKK	Amfetamine
CIAWJJ	Amphetamine
CIRRME	amfetamine sulphate
CR7ZIZ	Amfetamine
CYCBFJ	Amphetamine
D1ML9X	Amphetamine
DSIIZI	amphetamine
EETXBE	Amphetamine
EFYFAH	Amfetamine
F6X6YE	AMPHETAMINE
FCWGDG	Amphetamine
FDDDDD	Amphetamine
FOAXOB	Amphetamine
GBEQOO	amfetamine
HYYGXY	amfetamine
I00I00	amphetamine
I3M0R0	Amphetamine
I65IRM	Amfetamine
IXIIGE	Amphetamine



Code	Identified Substances
J16LCN	Amphetamine
KDXDTQ	amphetamine (sulphate)
KHHUDU	Amfetamine
KIWTWW	amfetamine
KLKETH	Amphetamine
KQAWWM	amfetamine
KRVKKK	Amfetamine
LR8ZF8	amfetamine
MD3HBL	Amphetamine
MMMPAF	Amphetamine
NDNKNO	Amphetamine
NRYXER	amphétamine sulfate
O8868C	Amfetamine
O9TL5W	Anfetamine
OCCZJT	amphetamine sulphate
OX8BRK	amphetamine
PALMQU	Amphetamin
PANNM8	amfetamine sulfate
PB6010	amphetamine sulphate
PLLLL8	Amphetaïne
QDRFLK	Amphetamine sulphate (Benzeneethanamine alpha methyl)
RD7T63	amphetamine
RUFE2Q	Amphetamin
SF333G	amfetamine sulphate
STOSY4	Amfetamine
SZSHC7	Amphetamine and Methamphetamine hydrochloride
T1SY9H	amfetamine sulphate
T4JYJJ	amphetamine sulphate
T7IRSI	Amphetamine.
TWSYBV	Amphetamine
UD61EE	Amphetamine
US8XCY	Amfetamine
UTTTMB	Amphétamine
V4I4MW	AMPETHAMINE
VAYVVE	amphetamine
VFEEPL	Amphetamine
VRFAV8	amphetamine
W25S5O	amfetamine
W6KMFE	Amphetamine Sulphate
WPQKKK	amfetamine
WRWSKK	Amphetamine
XWPXXO	amfetamine
YTNTAT	Amfetamine
ZCUG1P	AMPHETAMINE SULFATE



**UNODC**

United Nations Office on Drugs and Crime

INTERNATIONAL QUALITY ASSURANCE PROGRAMME (IQAP)  
INTERNATIONAL COLLABORATIVE EXERCISE (ICE)

<b>Code</b>	<b>Identified Substances</b>
ZXEDY8	amfetamine



## Statement of findings for Test Sample 3

Code	Amfetamine	
043DGG	+	
		Powder containing amphetamine.
0IXEIB	+	
0WLISW	+	
		SM-3 found to contain of 62.93% Amfetamine
27UK5U	+	
		One bottle containing 0.22 grammes of a powder containing 0.16 grammes of amphetamine.
2HDQIE	+	
2PBB39	+	
		test sample 2010/2/SM-3 was found to contain the following controlled drug; Amphetamine also known as benzene ethaminanniine- alpha-methyl
2PV2EF	+	
		On analysis, I found the substance to contain 72.0% amphetamine
4JJXE9	+	
		The sample was found to contain amphetamine type stimulants (amphetamine)
4MHZEW	+	
		SM-3 was indentify as anfetamine phosfate by FTIR
4SQ7LB	+	
		Presence of amphetamine confirmed - Class B.
5ECEUE	+	
		Amphetamine identified by GC-MS and quantified by HPLC-DAD upon a calibration curve performed by a certified reference material of amphetamine.
5RFV5	+	
		SM-3 contains Amphetamine sulfate with 72% Amphetamine base
61AKXC	+	
		The powder contained 71% amphetamine. Amphetamine is a Class B controlled drug.
6AXCXX	+	
		Using TLC, FTIR, GC/FID and GC/MS analytical techniques.
6C6UO6	+	
6GAX2Q	+	
		+ caffeine (trace) + N formyl amphetamine



Code	Amfetamine	
6L333G	+	
		The powder was found to contain Amfetamine
8GOLOO	+	
8GYZF6	+	
		Amphetamine detected by both, GCMS and FTIR.
91C2DV	+	
		On analysis, I found the powder to contain amphetamine. Amphetamine is a controlled drug under the Misuse of Drugs Acts 1977 and 1984. I did not determine the amphetamine content of the powder.
9R42IM	+	
AKBRFW	+	
		This sample contains amphetamine which is listed as a controlled drug, according to the xxxx order, appendix III of February 22nd 1990.
BFIZKK	+	
		Amphetamine
CIAWJJ	+	
		We found Amphetamine as controlled drugs in this sample
CIRRME	+	
		amphetamine sulphate, 72,90% as base, 4-methyl-5-phenilpyrimidine, N-formylamphetamine
CR7ZIZ	+	
		It contains amphetamine in a purity of 72.5%.
CYCBFJ	+	
		The sample contained 72.4% amphetamine
D1ML9X	+	
		0.232g Amphetamine
DSIIZI	+	
		the sample contains amphetamine (71% as base)
EETXBE	+	
		the sample contains 73.7% Amphetamine
EFYFAH	+	
		Amphetamine was determined in sample 3. Content of amphetamine was 73 % (as a base).
F6X6YE	+	
		Sample SM-3 represent white powder that contains psychoactive substance AMPHETAMINE.
FCWGDG	+	



Code	Amphetamine	
FDDDDD	+	
		The powder in item 2010/2/SM-3 was found to contain amphetamine
FOAXOB	+	
		Sample 2010/2/SM-3 contained 225 milligrams of powder. The powder was analysed and found to contain amphetamine. Amphetamine is a Class B controlled drug subject to the provisions of the Misuse of Drugs Act 1971.
GBEQOO	+	
		In the sample 3. we also have found amphetamine which is on the list of the controlled substance
HYYGXY	+	
I00I00	+	
		sample contains 70.8% of amphetamine (as base)
I3M0R0	+	
		The powder in item SM3 was analysed and found to contain amphetamine.
I65IRM	+	
		the sample contains Amphetamine sulfate.
IXIIGE	+	
		On analysis, I found the sample "2010/2/SM-3" to contain Amphetamine
J16LCN	+	
		Amphetamine reported
JY4CUT	+	
KDXDTQ	+	
KHHUDU	+	
		The finding was qualitative only. No quantitation performed.
KIWTWW	+	
		Sample containing only amphetamine
KLKETH	+	
		Sample 2010/2/SM-3 gave a positive result for amphetamine, a controlled substance.
KQAWWM	+	
		Presence of amphetamine
KRVKKK	+	
		This test sample is amphetamine mixture with characteristic compounds often found in seized amphetamine.
LR8ZF8	+	
		the same as SM-1



Code	Amfetamine	
MD3HBL	+	
		The sample contains 73.23 % amphetamine base (as sulphate salt ).
MMMPAF	+	
		Color test = marquis : orange turning to brown, simon : pink to cherry-red, TLC = TA and TE : Amphetamine, GC = Amphetamine base 81.00%, GC-MS = Amphetamine
NDNKNO	+	
		The powder contained 73% amphetamine. Amphetamine is a class B controlled drug.
NRYXER	+	
		presence de produit stupefiant repris dans l'arrêté du 22/02/1990 modifié
O8868C	+	
		Amfetamine detected in sample SM-3 but quantification not performed
O9TL5W	+	
		amphetamine sulfate
OCCZJT	+	
		white powder
OX8BRK	+	
		L'échantillon contient de l'amphetamine, substance stupéfiante reprise à l'annexe III de l'arrêté du 22 février 1990 modifié.
PALMQU	+	
PANNM8	+	
PB6010	+	
		sample contains amphetamine sulphate (71.5% as a base, SD=0.7)
PLLLL8	-	
		After marquis reaction is + appropriate quantity of powdered sample is dissolved in ethanol sonicate, filtration, the filtrate evaporate to 100 micro liter and identified by TLC and confirmed by GC/MS, and quantitation by GC/NPD
QDRFLK	+	
		The sample was found to contain amphetamine sulphate
RD7T63	+	
RGPVPP	+	
RUFE2Q	+	
		Gas Chromatography/Mass Spectrometry



Code	Amfetamine	
SF333G	+	
		This sample contains pure amfetamine sulphate (73.4 % as base).
STOSY4	+	
		found amfetamine with percentage by weight 63.0%
SZSHC7	+	
		TLC, HPLC, GC-MS
T1SY9H	+	
		The sample represents amfetamin sulphate.
T4JYJJ	+	
T7IRSI	+	
		In the sample they are amphetamine sulphate.
TWSYBV	+	
		The powder was analysed when it was found to contain Amphetamine.
UD61EE	+	
		Sample 2010/2/SM-3 was found to contain controlled substance AMPHETAMINE included in Table I of D.P.R. 309/90 (xxxx Law on psycotropic substances) and Schedule II under the UN Convention on Psychotropic Substances of 1971.
US8XCY	+	
		Sample contained Amfetamine, 77% by weight.
UTTTMB	+	
		l'échantillon contient du sulfate d'amphétamine .
V4I4MW	+	
VAYVVE	+	
VFEEPL	+	
		The powder was analysed and found to contain Amphetamine.
VRFAV8	+	
		The sample was found to contain amphetamine.
W25S5O	+	
		Sample 2010/2/SM-3 consists of white powder. Amfetamine, a prohibited substance included in the National Law for Narcotics 3459/2006, is found to be present in the sample 2010/2/SM-3.
W6KMFE	+	
		Sample 2010/2/SM-3 contains an average of 97% AMPHETAMINE SULPHATE. Amphetamine sulphate is a Class B controlled drug under the provisions of the Misuse of Drugs Act 1971 (as amended). The sample contained 226 milligrams of an off-white powder.



Code	Amfetamine	
WLFWUS	+	
WPQKKK	+	Whitepowder, net weight 0.222 g, containing 79.5% of amfetamine
WRWSKK	+	
XWPXXO	+	the sample contains amfetamine confirmed by marquis reagent, tlc and gcms
YTNTAT	+	
ZCUG1P	+	
ZSZ3ZZ	+	
ZXEDY8	+	amfetamine

**Response Summary**  
Participants: 90

Amfetamine:	89
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**Identification methods for Test Sample 3**

**Legend:** S ... used for Screening I ... used for Identification SI ... used for both

Analytical Technique Codes														
Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
043DGG	S		S	S				I	I					
0IXEIB				S		I			I					
0WLISW		S	S	I					I					S Fast Blue Salt B
27UK5U		S	S			I			SI	I				
2HDQIE	S	S	S						I	I				
2PBB39									SI					
2PV2EF		S							SI	I				
4JJXE9						S			I			I		
4MHZEW	I	SI	SI	SI						I	I			
4SQ7LB		S	S						I					
5ECEUE					I	I		I	SI	I				
5RFV5	I			SI					I	I				
61AKXC		S	S						I	I				
6AXCXX	SI			SI					I	I				
6C6UO6									SI	I				
6GAX2Q				I		I			SI	I				
6L333G				SI			SI		I					
8GOLOO									I	S				
8GYZF6									SI	I				
91C2DV				I					I					
9R42IM	S					I			SI					
AKBRFW									I	I				
BFIZKK				SI					I	I				
CIAWJJ				S				I	I					
CIRRME	S	S	S						I	I				I XRD
CR7ZIZ	S								I					
CYCBFJ	S	S	S	I					I	I				
D1ML9X		S	S						I					
DSIIZI		S			I				I					
EETXBE					I				SI					
EFYFAH									I	I				
F6X6YE		S	S	SI										
FCWGDG									SI	I				
FDDDDD	S								I					
FOAXOB		S	S						I					



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
GBEQOO				I					I	SI				
HYYGXY									I	I				S ion mobility spectrometry
I00I00	S	S	S						I	I				
I3M0R0		S	S						SI					
I65IRM		S	S	SI					I					
IXIIGE		S	S	I					I	I				S Duquenois Levine Test
J16LCN		S	S						I					
JY4CUT	S	S	S	I					I					
KDXDTQ				SI					I					
KHHUDU	S								I					
KIWTWW								I	SI					
KLKETH		S	S						I					
KQAWW M													SI	
KRVKKK				S		I			I	I				
LR8ZF8								I	SI					
MD3HBL		S		SI		I			I	SI				
MMMPAF	I	SI	S	I				I	I	I				
NDNKNO		S	S						I	I				
NRYXER		S	S						I	I				
O8868C		S		S					I					
O9TL5W									I	SI				
OCCZJT									SI	I				
OX8BRK				I					SI	I				
PALMQU		I		I					SI					
PANNM8									SI					
PB6010		S	S	I		I			I	I				
PLLLL8		S	S	SI			I	I	I					
QDRFLK	S			I	I				I					
RD7T63								I	SI	I				
RGPVPP						I			SI					
RUFE2Q	I	I	I	I					SI					
SF333G								I	I	I				
STOSY4									SI					
SZSHC7	SI	SI	S	I		I			I					
T1SY9H		S		SI				I	I	I				
T4JYJJ	S								I	I				
T7IRSI									I					
TWSYBV		S							I					S DMAB
UD61EE									I	SI				

Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
US8XCY		S	S						I					
UTTTMB									I	I				
V4I4MW							SI		SI					
VAYVVE		S	S						I					S duquenois-levis
VFEEPL		S	S						I					
VRFV8									SI					
W25S5O	S	S		I	I		I	I						
W6KMFE		S	S						I	I				
WLFWUS				S		I			I					
WPQKKK	S	S	S					I	I					
WRWSKK									I					S FPIA
XWPXXO	S	S	S	I					I		S			
YTNTAT						I			SI	SI				
ZCUG1P						I			SI					I XRD
ZSZ3ZZ	S							I	I					
ZXEDY8	SI	SI	S	S				I	I					

### Response Summary

Participants: 90 (combined ... some laboratories used technique for screening and for identification)

Section	140	141	142	150	160	161	170	171	180	190	200	230	231	210
Screening	19	38	32	18	0	1	2	0	25	6	1	0	1	6
	21.1%	42.2%	35.6%	20.0%	0.0%	1.1%	2.2%	0.0%	27.8%	6.7%	1.1%	0.0%	1.1%	6.7%
Identification	7	6	2	27	5	13	4	14	86	38	1	1	1	2
	7.8%	6.7%	2.2%	30.0%	5.6%	14.4%	4.4%	15.6%	95.6%	42.2%	1.1%	1.1%	1.1%	2.2%
# labs using this technique	23	40	33	34	5	14	4	14	86	39	2	1	1	8
	25.6%	44.4%	36.7%	37.8%	5.6%	15.6%	4.4%	15.6%	95.6%	43.3%	2.2%	1.1%	1.1%	8.9%



**False positives for Test Sample 3**

<b>Code</b>	<b>Name</b>
6GAX2Q	Caffeine
CIAWJJ	Caffeine
I3M0R0	Caffeine
SZSHC7	Metamfetamine

**Z-Scores for Test Sample 3**

CODE	Amfetamine MAD: 1.8		
	Conc. *	AbsDev	ZScore
0IXEIB	74.0	1.8	0.7
0WLISW	62.9	9.3	3.4
27UK5U	72.0	0.2	0.1
2PV2EF	72.1	0.1	0.1
5ECEUE	67.6	4.6	1.7
5RFVW5	72.0	0.2	0.1
61AKXC	71.0	1.2	0.4
6AXCXX	61.4	10.8	4.0
6C6UO6	75.6	3.4	1.3
6GAX2Q	26.0	46.2	17.2
6L333G	55.4	16.8	6.2
8GYZF6	92.0	19.8	7.4
9R42IM	71.0	1.2	0.4
AKBRFW	72.0	0.2	0.1
CIAWJJ	60.9	11.3	4.2
CIRRME	72.9	0.7	0.3
CR7ZIZ	72.5	0.3	0.1
CYCBFJ	72.4	0.2	0.1
DSIIZI	71.0	1.2	0.4
EETXBE	73.7	1.5	0.6
EFYFAH	73.0	0.8	0.3
FCWGDG	73.4	1.2	0.5
HYYGXY	72.8	0.6	0.2
I00I00	70.8	1.4	0.5
KDXDTQ	78.3	6.1	2.3
KIWTWW	99.7	27.5	10.2
KRVKKK	74.2	2.0	0.7
LR8ZF8	60.7	11.5	4.3
MD3HBL	73.2	1.0	0.4
MMMPAF	81.0	8.8	3.3
NDNKNO	73.0	0.8	0.3
OCCZJT	72.4	0.2	0.1
PALMQU	68.2	4.0	1.5
PANNM8	69.0	3.2	1.2
PB6010	71.5	0.7	0.3
QDRFLK	97.0	24.8	9.2
RD7T63	74.7	2.5	0.9
RGPVPP	71.5	0.7	0.3
RUFE2Q	72.2	0.0	0.0
SF333G	73.4	1.2	0.5
STOSY4	63.0	9.2	3.4



CODE	Amfetamine MAD: 1.8		
	Conc. *	AbsDev	ZScore
T7IRSI	70.2	2.0	0.7
US8XCY	77.0	4.8	1.8
V4I4MW	35.0	37.2	13.8
VAYVVE	72.2	0.0	0.0
W6KMF	71.0	1.2	0.4
WLFWUS	95.6	23.4	8.7
WPQKKK	79.5	7.3	2.7
WRWSKK	77.0	4.8	1.8
YTNTAT	70.7	1.5	0.6
ZSZ3ZZ	2.6	69.6	25.9
ZXEDY8	74.0	1.8	0.7

\*) Concentration: w/w %

Z-Score has been calculated as **modified Z-Score** as it is a robust method and therefore relatively insensitive to outliers.

**Modified Z-Score = 0.6745 \* AbsDev/MAD**

**AbsDev** = Absolute value of the difference between a laboratory value and the median of all the laboratory values for the given drug;

**MAD** = median absolute deviation about the median.

Modified Z-scores with an absolute value of greater than 3.5 should be considered as potential outliers.

Reference:

Iglewicz, B. and Hoaglin, D. C.: 1993 How to Detect and Handle Outliers, American Society for Quality Control, Milwaukee, WI

## Sample 4 Analysis

### Identified substances for Test Sample 4

Code	Identified Substances
0WLISW	Amfetamine
4MHZEW	stach
5RFVV5	none
BFIZKK	No
F6X6YE	none
MMMPAF	Corn syrup
OCCZJT	no
QDRFLK	Cannabidiol
T1SY9H	/
WRWSKK	-
YTNTAT	/
ZXEDY8	-



## Statement of findings for Test Sample 4

Code	[blank sample]
043DGG	
0IXEIB	
0WLISW	SM-4 found to contain of 0.63% Amfetamine
27UK5U	The sample did not contain any controlled substances.
2HDQIE	The sample contains starch
2PBB39	no control drugs were found in test sample 2010/2/SM-4
2PV2EF	On analysis, I found the substance to contain no controlled drugs.
4JJXE9	The sample was found free of the analysed controlled drugs.
4MHZEW	negative result for all color test. FTIR result positive for caffeine and starch, after
4SQ7LB	No controlled drugs detected.
5ECEUE	Not found controlled drugs. Present only corn starch.
5RFVV5	SM-4 does not contain any controlled drugs
61AKXC	No controlled drugs were detected in the powder.
6AXCXX	Using CR, IONSCAN, FTIR, TLC, GC/FID and GC/MS analytical techniques.
6C6UO6	
6GAX2Q	Starch
6L333G	Examination of the powder did not revealed the presence of any controlled drugs



Code	[blank sample]
8GOLOO	
8GYZF6	Corn Starch detected only by FTIR.
91C2DV	On analysis, no controlled drugs were detected.
9R42IM	
AKBRFW	
BFIZKK	-
CIAWJJ	No controlled drugs detected, but we found Phenylethylketone in this sample
CIRRME	Starch
CR7ZIZ	It does not contain any controlled drugs. It contains starch. It also contains sucrose and fatty acids in minute amounts.
CYCBFJ	The sample did not contained any controlled substance
D1ML9X	0.225g No controlled drugs detected
DSIIZI	the sample contains starch
EETXBE	NO Adultrant or drugs were detected
EFYFAH	Illicit drugs in sample 4 were not detected. Starch (amylum) was determined in sample 4.
F6X6YE	Sample SM-4 is white powder that contains corn starch.
FCWGDG	Starch
FDDDDD	No controlled drugs detected



Code	[blank sample]
FOAXOB	Sample 2010/2/SM-4 contained 216 milligrams of powder. The powder was analysed and no controlled drugs subject to the provisions of The Misuse of Drugs Act 1971.
GBEQOO	in the sample 4 we have not found any kind of controled substances
HYYGXY	
I00I00	sample doesn't contain controlled drugs
I3M0R0	The powder in item SM4 was analysed and no controlled drugs subject to the provisions of the misuse of Drugs Act 1971 were detected. Further analysis to identify the powder has not been carried out.
I65IRM	sample contains starch
IXIIGE	On analysis, I found the sample "2010/2/SM-4" not contain common drugs
J16LCN	No controlled drugs detected
JY4CUT	
KDXDTQ	We only found starch. (this result leaves us wondering, since it would be the first time you've provided a sample containing ONLY this, but we repeated the tests a number of times and with different techniques and couldn't arrive to a different result)
KHHUDU	
KIWTWW	Sample containing only starch
KLKETH	No controlled substances were detected in sample 2010/2/SM-4.
KQAWWM	
KRVKKK	This test sample is starch.
LR8ZF8	
MD3HBL	



Code	[blank sample]
MMMPAF	FT-IR = corn syrup
NDNKNO	No controlled drugs were detected in the powder, which contained starch.
NRYXER	
O8868C	No drugs detected in sample SM-4
O9TL5W	
OCCZJT	white powder identified as starch
OX8BRK	La recherche de substance stupéfiante s'est révélée négative.
PALMQU	
PANNM8	Amidon
PB6010	sample contain starch
PLLLL8	Contain none, of the substances included in the menu. after testing on TLCand GC/MS
QDRFLK	The sample was found to contain cannabidiol
RD7T63	
RGPVPP	
RUFE2Q	
SF333G	This sample only contains starch.
STOSY4	not found any controlled drugs



Code	[blank sample]
SZSHC7	
T1SY9H	The sample contains some kind of starch.
T4JYJJ	starch
T7IRSI	In the sample they are starch
TWSYBV	The powder was analysed for the presence of drugs controlled under the terms of the Misuse of Drugs Act 1971 with a negative result.
UD61EE	Sample 2010/2/SM-2 was found to contain no controlled substances included in Table I of D.P.R. 309/90 (xxxx Law on psycotropic substances) or in Schedules I-IV of the UN Convention on Psychotropic Substances of 1971.
US8XCY	Negative for controlled drugs, indications of flour / baking powder tested by use of GC-MS (180) & FTIR (190)
UTTTMB	
V4I4MW	
VAYVVE	The GC/MS didnt detect any substance.
VFEEPL	The powder was analysed for controlled substances with a negative result.
VRFV8	No common controlled drug was detected in the sample.
W25S5O	Sample 2010/2/SM-4 consists of white powder. No prohibited substances are found to be present in sample 2010/2/SM-4 according to the National Law for Narcotics 3459/2006.
W6KMFE	Sample 2010/2/SM-4 contains starch. Starch is not controlled drug under the provisions of the Misuse of Drugs Act 1971 (as amended). The sample contained 221 milligrams of an off-white powder.
WLFWUS	
WPQKKK	White- powder, net weight 0.243 g.The sample was found positive to hallucinogen drugs by colorimetric reaction (screening) but negative by GC-MS (identification/confirmation). It contains starch, but further investigation should be performed.
WRWSKK	



Code	[blank sample]
XWPXXO	the sample only contains starch detected by colorimetric reaction
YTNTAT	
ZCUG1P	WHEAT STARCH
ZSZ3ZZ	
ZXEDY8	-

**Response Summary**  
Participants: 90



Identification methods for Test Sample 4

**Legend:** S ... used for Screening I ... used for Identification SI ... used for both

Analytical Technique Codes														
Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
043DGG	S		S	S				I	I					
0IXEIB				S		I			I					
0WLISW		S	S	I					I					S Fast Blue Salt B
27UK5U		S	S			I			SI	I				
2HDQIE	S	S	S						I	I				
2PBB39									SI					
2PV2EF		S							SI	I				
4JJXE9						S			I			I		
4MHZEW	I	SI	SI	SI						I	I			
4SQ7LB		S	S						I					
5ECEUE					I	I		I	SI	I				
5RFV5	I			SI					I	I				
61AKXC		S	S						I	I				
6AXCXX	SI			SI					I	I				
6C6UO6									SI	I				
6GAX2Q				I		I			SI	I				
6L333G				SI			SI		I					
8GOLOO									I	S				
8GYZF6									SI	I				
91C2DV				I					I					
9R42IM	S					I			SI					
AKBRFW									I	I				
BFIZKK				SI					I	I				
CIAWJJ				S				I	I					
CIRRME	S	S	S						I	I				I XRD
CR7ZIZ	S								I					
CYCBFJ	S	S	S	I					I	I				
D1ML9X		S	S						I					
DSIIZI		S			I				I					
EETXBE					I				SI					
EFYFAH									I	I				
F6X6YE		S	S	SI										
FCWGDG									SI	I				
FDDDDD	S								I					
FOAXOB		S	S						I					



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
GBEQOO				I					I	SI				
HYYGXY									I	I				S ion mobility spectrometry
I00I00	S	S	S						I	I				
I3M0R0		S	S						SI					
I65IRM		S	S	SI					I					
IXIIGE		S	S	I					I	I				S Duquenois Levine Test
J16LCN		S	S						I					
JY4CUT	S	S	S	I					I					
KDXDTQ				SI					I					
KHHUDU	S								I					
KIWTWW								I	SI					
KLKETH		S	S						I					
KQAWW M													SI	
KRVKKK				S		I			I	I				
LR8ZF8								I	SI					
MD3HBL		S		SI		I			I	SI				
MMMPAF	I	SI	S	I				I	I	I				
NDNKNO		S	S						I	I				
NRYXER		S	S						I	I				
O8868C		S		S					I					
O9TL5W									I	SI				
OCCZJT									SI	I				
OX8BRK				I					SI	I				
PALMQU		I		I					SI					
PANNM8									SI					
PB6010		S	S	I		I			I	I				
PLLLL8		S	S	SI			I	I	I					
QDRFLK	S			I	I				I					
RD7T63								I	SI	I				
RGPVPP						I			SI					
RUFE2Q	I	I	I	I					SI					
SF333G								I	I	I				
STOSY4									SI					
SZSHC7	SI	SI	S	I		I			I					
T1SY9H		S		SI				I	I	I				
T4JYJJ	S								I	I				
T7IRSI									I					
TWSYBV		S							I					S DMAB
UD61EE									I	SI				



Code	140	141	142	150	160	161	170	171	180	190	200	230	231	210
US8XCY		S	S						I					
UTTTMB									I	I				
V4I4MW							SI		SI					
VAYVVE		S	S						I					S duquenois-levis
VFEEPL		S	S						I					
VRFV8									SI					
W25S5O	S	S		I	I		I	I						
W6KMFE		S	S						I	I				
WLFWUS				S		I			I					
WPQKKK	S	S	S					I	I					
WRWSKK									I					S FPIA
XWPXXO	S	S	S	I					I		S			
YTNTAT						I			SI	SI				
ZCUG1P						I			SI					I XRD
ZSZ3ZZ	S							I	I					
ZXEDY8	SI	SI	S	S				I	I					

**Response Summary**

Participants: 90 (combined ... some laboratories used technique for screening and for identification)

Section	140	141	142	150	160	161	170	171	180	190	200	230	231	210
Screening	19	38	32	18	0	1	2	0	25	6	1	0	1	6
	21.1%	42.2%	35.6%	20.0%	0.0%	1.1%	2.2%	0.0%	27.8%	6.7%	1.1%	0.0%	1.1%	6.7%
Identification	7	6	2	27	5	13	4	14	86	38	1	1	1	2
	7.8%	6.7%	2.2%	30.0%	5.6%	14.4%	4.4%	15.6%	95.6%	42.2%	1.1%	1.1%	1.1%	2.2%
<b># labs using this technique</b>	<b>23</b>	<b>40</b>	<b>33</b>	<b>34</b>	<b>5</b>	<b>14</b>	<b>4</b>	<b>14</b>	<b>86</b>	<b>39</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>8</b>
	<b>25.6%</b>	<b>44.4%</b>	<b>36.7%</b>	<b>37.8%</b>	<b>5.6%</b>	<b>15.6%</b>	<b>4.4%</b>	<b>15.6%</b>	<b>95.6%</b>	<b>43.3%</b>	<b>2.2%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>8.9%</b>



**False positives for Test Sample 4**

<b>Code</b>	<b>Name</b>
0WLISW	Amfetamine
2HDQIE	Lactose
QDRFLK	Cannabidiol



**Z-Scores for Test Sample 4**

Quantification is not required.



**UNODC**

United Nations Office on Drugs and Crime

INTERNATIONAL QUALITY ASSURANCE PROGRAMME (IQAP)  
INTERNATIONAL COLLABORATIVE EXERCISE (ICE)

The Laboratory and Scientific Section  
UNODC, International Centre  
Wagramer Strasse 5, P.O. Box 500  
A-1400, Vienna, AUSTRIA  
Email: [iss.ice@unodc.org](mailto:iss.ice@unodc.org)